

REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-18 are pending in this application, Claims 1, 7-10, 12, and 18 are amended, and Claims 2-6 and 13-17 are canceled without prejudice or disclaimer by the present amendment. Claims 1, 12, and 18 are amended to correct the informality noted in the outstanding Office Action and to more clearly described and distinctly claim the subject matter that Applicants' regard as the invention. Support for the Amendments to Claims 1, 12, and 18 are found in the Specification at page 15, line 24 to page 16, line 2, and original Claims 2-6, for example, and no new matter is added.

In the outstanding Office Action, Claim 1 was objected to; Claims 1-17 were rejected under 35 U.S.C. §103(a) as unpatentable over Lewis (U.S. Patent No. 3,677,616) in view of King (U.S. Patent No. 6,700,686), and further in view of Bloom et al. (U.S. Patent No. 5,311,360, hereinafter Bloom); Claim 18 was rejected under 35 U.S.C. §103(a) as unpatentable over Long (U.S. Patent No. 5,986,781) in view of Hariharan; and Claim 18 was rejected under 35 U.S.C. §103(a) as unpatentable over Lewis in view of Hariharan.

With respect to the objection to Claim 1, Applicants respectfully submit that the amendment to Claim 1 overcomes the objection.

Applicants respectfully traverse the outstanding ground of rejection because the outstanding Office Action fails to provide a *prima facie* case of obviousness by asserting prior art that, no matter how the prior art references are combined, does not teach every limitation of independent Claim 1, as amended.

To establish a *prima facie* case of obviousness, M.P.E.P. §2143 requires that three criteria must be met. First there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the

art, to modify the reference or to combine the references teachings. Second, there must be a reasonable expectation of success. Finally, the prior art references must teach or suggest all the claim elements.

In a non-limiting embodiment of the claimed invention, diffracted light beams from the one-dimensional type diffraction control element in a repetitive on/off pattern include diffracted light beams from the individual diffraction control elements in addition to diffracted light beams from the phase control elements.<sup>1</sup>

Amended Claim 1 recites "...the individual diffraction control elements have even numbers of phase control elements for controlling phase differences among outgoing light from each element so that the zero order diffracted light cancel each other, resulting in zero intensity...." Indeed, Lewis, King, and Bloom do not teach or suggest phase control elements as recited in Claim 1.

Bloom does not describe or suggest "the zero order diffracted light cancel each other." On the contrary, Bloom describes a grating that is used in combination with a system for detecting the zero order of light reflected from the grating.<sup>2</sup> Thus, Bloom does not describe or suggest canceling the zero order diffracted light because Bloom describes detecting the zero order diffracted light.

Futhermore, Bloom provides no motivation to be modified to control phase differences among outgoing light from each element so that the zero order diffracted light cancel each other.

King does not cure the deficiency in Bloom. King was only cited to describe a condensing element and provides no description or suggestion to have "zero order diffracted light cancel each other out."

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<sup>1</sup> Specification, page 26, lines 14-20, and Figs. 7 and 8.

<sup>2</sup> Bloom, col. 6, lines 41 to 47.

Lewis does not cure the deficiency in Bloom. There is no teaching or suggestion that the diffusing structure 27 of Lewis controls phase differences among outgoing light from each element so that the zero order diffracted light cancel each other.

Thus, in view of the above-noted distinctions, Applicants respectfully submit that amended Claim 1 (and Claims 7-11) patentably distinguish over the Lewis, King, and Bloom, alone or in proper combination. In addition, Applicants respectfully submit that that Claims 12 and 18 patentably distinguish over the Lewis, King, and Bloom, alone or in proper combination, for at least the reasons give for Claim 1.

Consequently, in view of the above amendments and comments, it is respectfully submitted that the outstanding rejection is traversed and that the pending claims are in condition for allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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